

SINGLE AND MULTILAYER WAVEGUIDES AND FABRICATION PROCESS

Abstract of the Disclosure

5 An optoreflective structure for reflecting an optical signal following a path
defined by an optical waveguide comprising a first cladding layer having a first planar
cladding surface; a waveguide disposed on the first cladding layer; and a second cladding
layer disposed on the waveguide and having a second planar cladding surface. The first
cladding layer, the second cladding layer and the waveguide terminate in a generally
dove-tailed structure having a beveled planar surface. An optoreflector is disposed on the
10 beveled planar surface for a changing direction of an optical signal passing through the
waveguide. A method for producing an optoreflective structure comprising providing a
substrate supporting a first cladding layer having a first planar cladding surface;
disposing a waveguide material on the first cladding layer; and forming on the waveguide
material a second cladding layer having a second planar cladding surface. The method
15 also comprises forming a beveled planar surface in the first cladding layer, in the
waveguide material, and in the second cladding layer; and depositing an optical signal-
changing surface on the beveled planar surface.